TDMS No. 97008 - 05 Test Type: CHRONIC P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

PROPARGYL ALCOHOL

**CAS Number:** 107-19-7

Species/Strain: RATS/F 344

Pathologist: HARBO, S. - LIEUALLEN, W.

. - LIEUALLEN, W. Lab: BNW

Date Report Reqsted: 08/09/2006

First Dose M/F: 10/01/01 / 10/01/01

Time Report Reqsted: 14:01:40

F1\_R2

**C Number:** C97008

Route: RESPIRATORY EXPOSURE WHOLE BODY

**Lock Date:** 08/16/2004

Cage Range: ALL

Date Range: ALL

Reasons For Removal: 25021 TSAC 25020 NATD 25019 MSAC

Removal Date Range: ALL

Treatment Groups: Include ALL

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL

CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS MALE                | CONTROL  | 16 PPM    | 32 PPM   | 64 PPM  |  |
|--------------------------------------|----------|-----------|----------|---------|--|
| Disposition Summary                  |          |           |          |         |  |
| Animals Initially in Study           | 50       | 50        | 50       | 50      |  |
| Early Deaths                         |          |           |          |         |  |
| Moribund Sacrifice                   | 20       | 19        | 26       | 30      |  |
| Natural Death                        | 2        | 8         | 9        | 4       |  |
| Survivors                            |          |           |          |         |  |
| Moribund Sacrifice                   | 1        |           |          |         |  |
| Terminal Sacrifice                   | 26       | 23        | 15       | 16      |  |
| Animals Examined Microscopically     | 49       | 50        | 50       | 50      |  |
| ALIMENTARY SYSTEM                    |          |           |          |         |  |
| Intestine Large, Colon               | (47)     | (46)      | (45)     | (49)    |  |
| Artery, Inflammation, Chronic Active | 1 (2%)   | ,         | ,        | ,       |  |
| Intestine Large, Rectum              | (47)     | (47)      | (46)     | (50)    |  |
| Edema                                | 1 (2%)   | ,         | ,        | ,       |  |
| Inflammation, Suppurative            | 1 (2%)   |           |          |         |  |
| Intestine Small, Jejunum             | (46)     | (45)      | (45)     | (48)    |  |
| Liver                                | (49)     | (50)      | (50)     | (50)    |  |
| Angiectasis                          | 1 (2%)   | 3 (6%)    | , ,      | , ,     |  |
| Basophilic Focus                     | 7 (14%)  | 18 (36%)  | 15 (30%) | 4 (8%)  |  |
| Clear Cell Focus                     | 10 (20%) | 13 (26%)  | 9 (18%)  | 4 (8%)  |  |
| Degeneration, Cystic                 | 3 (6%)   | 1 (2%)    | 1 (2%)   | 2 (4%)  |  |
| Eosinophilic Focus                   | 2 (4%)   | 4 (8%)    | 2 (4%)   | 5 (10%) |  |
| Hematopoietic Cell Proliferation     | 1 (2%)   | 1 (2%)    | 1 (2%)   |         |  |
| Hemorrhage                           |          |           | 1 (2%)   |         |  |
| Hepatodiaphragmatic Nodule           |          | 5 (10%)   | 2 (4%)   | 1 (2%)  |  |
| Inflammation, Granulomatous          |          |           | 1 (2%)   |         |  |
| Inflammation, Chronic Active         | 1 (2%)   |           | 1 (2%)   |         |  |
| Mixed Cell Focus                     | 2 (4%)   | 4 (8%)    | 5 (10%)  | 3 (6%)  |  |
| Necrosis                             | 1 (2%)   | 2 (4%)    | 2 (4%)   | 2 (4%)  |  |
| Vacuolization Cytoplasmic            | 7 (14%)  | 5 (10%)   | 3 (6%)   | 3 (6%)  |  |
| Centrilobular, Degeneration          | 1 (2%)   |           |          | 1 (2%)  |  |
| Hepatocyte, Regeneration             |          |           |          | 2 (4%)  |  |
| Mesentery                            | (11)     | (14)      | (7)      | (3)     |  |
| Necrosis                             | 10 (91%) | 14 (100%) | 7 (100%) | 2 (67%) |  |
| Thrombosis                           |          |           |          | 1 (33%) |  |
| Artery, Inflammation, Chronic Active | 1 (9%)   |           |          |         |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS MALE  | CONTROL                    | 16 PPM                      | 32 PPM                      | 64 PPM                      |  |
|--|----------------------------|-----------------------------|-----------------------------|-----------------------------|--|
| Oral Mucosa  | (0)                        | (1)                         | (1)                         | (0)                         |  |
| Pancreas   | (49)                       | (50)                        | (50)                        | (50)                        |  |
| Acinus, Atrophy  | 24 (49%)                   | 21 (42%)                    | 22 (44%)                    | 26 (52%)                    |  |
| Acinus, Hyperplasia  | 3 (6%)                     | 1 (2%)                      | 1 (2%)                      | 1 (2%)                      |  |
| Duct, Necrosis   |                            |                             | 1 (2%)                      |                             |  |
| Salivary Glands  | (49)                       | (50)                        | (50)                        | (50)                        |  |
| Stomach, Forestomach   | (49)                       | (50)                        | (50)                        | (50)                        |  |
| Edema  | 1 (2%)                     |                             |                             |                             |  |
| Erosion  |                            | 1 (2%)                      | - 4                         | 1 (2%)                      |  |
| Hyperplasia, Squamous  |                            | 3 (6%)                      | 3 (6%)                      |                             |  |
| Inflammation, Chronic  | 4 (00()                    | 0 (00()                     | 1 (2%)                      | 0 (404)                     |  |
| Ulcer  | 4 (8%)                     | 3 (6%)                      | 3 (6%)                      | 2 (4%)                      |  |
| Stomach, Glandular   | (49)                       | (50)                        | (50)                        | (50)                        |  |
| Erosion  | 4 (8%)                     | 2 (4%)                      | 5 (10%)                     | 3 (6%)                      |  |
| Ulcer  | 5 (10%)                    | (0)                         | 1 (2%)                      | 4 (8%)                      |  |
| Tongue   | (1)                        | (0)                         | (2)                         | (1)                         |  |
| ARDIOVASCULAR SYSTEM  Heart Cardiomyopathy Atrium, Thrombosis                    | (49)<br>44 (90%)<br>3 (6%) | (50)<br>44 (88%)<br>6 (12%) | (50)<br>44 (88%)<br>8 (16%) | (50)<br>43 (86%)<br>5 (10%) |  |
| NDOCRINE SYSTEM  |                            |                             |                             |                             |  |
| Adrenal Cortex Degeneration, Cystic  | (49)<br>1 (2%)             | (50)                        | (50)                        | (50)                        |  |
| Hematopoietic Cell Proliferation   | 1 (2%)                     | 00 (400()                   | 07 (7 10()                  | 00 (500()                   |  |
| Hyperplasia  | 19 (39%)                   | 23 (46%)                    | 27 (54%)                    | 28 (56%)                    |  |
| Hypertrophy  | 1 (2%)                     |                             | 4 (00()                     |                             |  |
| Thrombosis   | 44 (000/)                  | 0 (400()                    | 1 (2%)                      | 7 (4 40()                   |  |
| Vacuolization Cytoplasmic<br>Subcapsular, Hyperplasia                            | 11 (22%)                   | 8 (16%)                     | 9 (18%)                     | 7 (14%)                     |  |
|  | 1 (2%)                     | (50)                        | (50)                        | (50)                        |  |
|  | (40)                       | (6/1)                       |                             |                             |  |
| Adrenal Medulla  | (49)<br>15 (31%)           | (50)<br>10 (38%)            | 21 (42%)                    | 18 (36%)                    |  |
| Adrenal Medulla<br>Hyperplasia   | 15 (31%)                   | (50)<br>19 (38%)            | 21 (42%)                    | 18 (36%)                    |  |
| Adrenal Medulla Hyperplasia Infiltration Cellular, Lymphocyte                    | 15 (31%)<br>1 (2%)         | 19 (38%)                    | 21 (42%)                    | 18 (36%)                    |  |
| Adrenal Medulla Hyperplasia Infiltration Cellular, Lymphocyte Islets, Pancreatic | 15 (31%)<br>1 (2%)<br>(49) | 19 (38%)<br>(50)            | 21 (42%) (50)               | 18 (36%)<br>(50)            |  |
| Adrenal Medulla Hyperplasia Infiltration Cellular, Lymphocyte                    | 15 (31%)<br>1 (2%)         | 19 (38%)                    | 21 (42%)                    | 18 (36%)                    |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL

CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| Pars Intermedia, Cyst Thyroid Gland Cyst Cyst C-cell, Hyperplasia Follicular Cell, Hyperplasia Follicul | FISCHER 344 RATS MALE          | CONTROL    | 16 PPM     | 32 PPM     | 64 PPM             |  |
|--|--------------------------------|------------|------------|------------|--------------------|--|
| Pars Distalis. Hyperplasia 8 (16%) 6 (12%) 6 (12%) 13 (26%) Pars Intermedia. Cyst 1 (29) Thyroid Gland (49) (50) (50) (50) Cyst 1 (2%) Follicular Cell, Hyperplasia 8 (16%) 6 (12%) 15 (30%) 12 (24%) Follicular Cell, Hyperplasia 8 (16%) 6 (12%) 15 (30%) 12 (24%) Follicular Cell, Hyperplasia 8 (16%) 6 (12%) 15 (30%) 12 (24%) Follicular Cell, Hyperplasia 8 (16%) 6 (12%) 15 (30%) 12 (24%) Follicular Cell, Hyperplasia 9 (10) (0) (0) (0) (0) Tissue NOS (1) (0) (0) (0) (0) (0)  ENITAL SYSTEM  Coagulating Gland (0) (0) (0) (1) (1) (0) Inflammation, Suppurative 1 (100%) Fepiddymis (49) (50) (50) (50) Fenis (0) (0) (0) (0) (1) Inflammation, Suppurative (49) (50) (50) (50) Fenis (0) (10) (0) (10) (10) Cyst (10) Cyst (10) Cyst (10) Cyst (10) Inflammation, Chronic Active (18 (37%) 12 (24%) 11 (22%) 12 (24%) Inflammation, Chronic Active (49) (50) (50) (50) Frostate (49) (50) (50) (50) Fro |                                | (49)       | (50)       | (50)       | (50)               |  |
| Thyroid Gland Cyst (49) (50) (50) (50) (50) (50) (50) (50) (50   | Pars Distalis, Hyperplasia     | 8 (16%)    |            |            | 13 (26%)           |  |
| C-cell, Hyperplasia  | Thyroid Gland                  | (49)       |            | (50)       |                    |  |
| Peritoneum (1) (0) (0) (0) (0) (0) Tissue NOS (1) (0) (0) (0) (0) (0) (0) (0) (0) (0) (0   | C-cell, Hyperplasia            | 8 (16%)    | 6 (12%)    | 15 (30%)   | 12 (24%)<br>1 (2%) |  |
| Tissue NOS   | ENERAL BODY SYSTEM             |            |            |            |                    |  |
| Coagulating Gland<br>Inflammation, Suppurative         (0)         (0)         (1)         (0)           Epididymis         (49)         (50)         (50)         (50)           Penis         (0)         (0)         (0)         (0)         (1)           Inflammation, Suppurative<br>Preputial Gland         (49)         (49)         (50)         (49)           Cyst<br>Hyperplasia         1 (2%)         1 (2%)         1 (2%)         1 (2%)           Necrosis         1 (49)         (50)         (50)         (50)           Prostate         (49)         (50)         (50)         (50)           Hyperplasia         9 (18%)         2 (4%)         10 (20%)         8 (16%)           Inflammation, Suppurative         31 (63%)         41 (82%)         36 (72%)         34 (68%)           Inflammation, Chronic Active         4 (8%)         1 (2%)         2 (4%)           Seminal Vesicle         (49)         (50)         (50)         (50)           Hyperplasia         1 (2%)         1 (2%)         2 (4%)           Germinal Epithelium, Atrophy         6 (12%)         3 (6%)         3 (6%)         3 (6%)         4 (8%)           EMATOPOIETIC SYSTEM   |                                | (1)<br>(1) | (0)<br>(0) | (0)<br>(0) | (0)<br>(0)         |  |
| Inflammation, Suppurative Epididymis (49) (50) (50) (50) (50) (50) (50) (50) (50   | NITAL SYSTEM                   |            |            |            |                    |  |
| Epididymis (49) (50) (50) (50) (50) (50) (50) (50) (50   |                                | (0)        | (0)        | (1)        | (0)                |  |
| Penis (0) (0) (0) (0) (1) (1) Inflammation, Suppurative  |                                | (49)       | (50)       |            | (50)               |  |
| Preputial Gland<br>Cyst       (49)       (49)       (50)       (49)         Hyperplasia       1 (2%)       1 (2%)       1 (2%)         Inflammation, Chronic Active       18 (37%)       12 (24%)       11 (22%)       12 (24%)         Necrosis       (49)       (50)       (50)       (50)         Prostate       (49)       (50)       (50)       (50)         Hyperplasia       9 (18%)       2 (4%)       10 (20%)       8 (16%)         Inflammation, Suppurative       31 (63%)       41 (82%)       36 (72%)       34 (68%)         Inflammation, Chronic Active       4 (8%)       1 (2%)       2 (4%)         Seminal Vesicle       (49)       (50)       (50)       (50)         Hyperplasia       1 (2%)       (50)       (50)       (50)         Testes       (49)       (50)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)  | Penis                          |            |            |            | (1)                |  |
| Cyst Hyperplasia Inflammation, Chronic Active Necrosis Prostate Hyperplasia Inflammation, Suppurative Inflammation, Chronic Active Inflammation, Suppurative Inflammation, Suppurative Inflammation, Chronic Active Inflamm | Inflammation, Suppurative      |            |            |            | 1 (100%)           |  |
| Hyperplasia   2 (4%)   11 (22%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   12 (24%)   13 (25%)   13 (25%)   14 (25%)   15 (25%)   |                                | (49)       | (49)       |            | (49)               |  |
| Inflammation, Chronic Active       18 (37%)       12 (24%)       11 (22%)       12 (24%)         Necrosis       1 (2%)       1 (2%)       1 (2%)         Prostate       (49)       (50)       (50)       (50)         Hyperplasia       9 (18%)       2 (4%)       10 (20%)       8 (16%)         Inflammation, Suppurative       31 (63%)       41 (82%)       36 (72%)       34 (68%)         Inflammation, Chronic Active       4 (8%)       1 (2%)       2 (4%)         Seminal Vesicle       (49)       (50)       (50)       (50)         Hyperplasia       1 (2%)       (50)       (50)       (50)         Testes       (49)       (50)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)  |                                |            |            | 1 (2%)     | 2 (4%)             |  |
| Necrosis   1 (2%)   (49)   (50)   (   |                                | 18 (37%)   | 12 (24%)   | 11 (22%)   | 12 (24%)           |  |
| Hyperplasia       9 (18%)       2 (4%)       10 (20%)       8 (16%)         Inflammation, Suppurative       31 (63%)       41 (82%)       36 (72%)       34 (68%         Inflammation, Chronic Active       4 (8%)       1 (2%)       2 (4%)         Seminal Vesicle       (49)       (50)       (50)       (50)         Hyperplasia       1 (2%)       (50)       (50)       (50)         Testes       (49)       (50)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)   | Necrosis                       |            |            |            | 1 (2%)             |  |
| Inflammation, Suppurative       31 (63%)       41 (82%)       36 (72%)       34 (68%)         Inflammation, Chronic Active       4 (8%)       1 (2%)       2 (4%)         Seminal Vesicle       (49)       (50)       (50)       (50)         Hyperplasia       1 (2%)       (50)       (50)       (50)         Testes       (49)       (50)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)  |                                |            |            |            |                    |  |
| Inflammation, Chronic Active       4 (8%)       1 (2%)       2 (4%)         Seminal Vesicle       (49)       (50)       (50)       (50)         Hyperplasia       1 (2%)       (50)       (50)       (50)         Testes       (49)       (50)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)  |                                |            |            |            |                    |  |
| Seminal Vesicle       (49)       (50)       (50)         Hyperplasia       1 (2%)         Testes       (49)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)   |                                |            | 41 (82%)   |            |                    |  |
| Hyperplasia       1 (2%)         Testes       (49)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)  |                                |            | (50)       |            |                    |  |
| Testes       (49)       (50)       (50)       (50)         Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)  |                                |            | (30)       | (30)       | (50)               |  |
| Germinal Epithelium, Atrophy       6 (12%)       3 (6%)       3 (6%)       4 (8%)         Interstitial Cell, Hyperplasia       4 (8%)       4 (8%)       7 (14%)       5 (10%)    EMATOPOIETIC SYSTEM  |                                |            | (50)       | (50)       | (50)               |  |
| EMATOPOIETIC SYSTEM  | Germinal Epithelium, Atrophy   |            | 3 (6%)     | 3 (6%)     |                    |  |
|  | Interstitial Cell, Hyperplasia | 4 (8%)     | 4 (8%)     | 7 (14%)    | 5 (10%)            |  |
|  | MATOPOIETIC SYSTEM             |            |            |            |                    |  |
| Bone Marrow (49) (50) (50) (50) Myelofibrosis 1 (2%)   |                                | (49)       |            | (50)       | (50)               |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

|   | CONTROL  | 16 PPM   | 32 PPM        | 64 PPM    |  |
|---|----------|----------|---------------|-----------|--|
| Erythroid Cell, Hyperplasia                   |          | 1 (2%)   | 2 (4%)        | 1 (2%)    |  |
| Lymph Node                                    | (5)      | (3)      | (7)           | (8)       |  |
| Deep Cervical, Hemorrhage                     | 1 (20%)  | 1 (33%)  | 1 (Ì4%)       | ,         |  |
| Deep Cervical, Hyperplasia, Lymphoid          | 1 (20%)  | ,        | ,             |           |  |
| Pancreatic, Angiectasis                       | 2 (40%)  |          |               | 2 (25%)   |  |
| Pancreatic, Infiltration Cellular, Histiocyte | _ ( ,    |          | 1 (14%)       | _ (== /=) |  |
| Lymph Node, Bronchial                         | (6)      | (4)      | (8)           | (7)       |  |
| Angiectasis                                   | 1 (17%)  | ( ' /    | 2 (25%)       | ( )       |  |
| Hemorrhage                                    | 1 (1770) |          | 1 (13%)       |           |  |
| Hyperplasia, Lymphoid                         | 1 (17%)  | 2 (50%)  | 1 (13%)       |           |  |
| Lymph Node, Mandibular                        | (0)      | (1)      | (1)           | (0)       |  |
| Hyperplasia, Lymphoid                         | (0)      | 1 (100%) | (1)           | (0)       |  |
| Lymph Node, Mediastinal                       | (24)     | (24)     | (24)          | (26)      |  |
| Angiectasis                                   | (24)     | 1 (4%)   | (24)          | (20)      |  |
|   |          |          |               |           |  |
| Hemorrhage                                    | 0 (400/) | 1 (4%)   | 0 (400()      | 0 (00()   |  |
| Hyperplasia, Lymphoid                         | 3 (13%)  | 1 (4%)   | 3 (13%)       | 2 (8%)    |  |
| Infiltration Cellular, Histiocyte             | 1 (4%)   | 4 (40()  |               |           |  |
| Inflammation, Chronic Active                  |          | 1 (4%)   |               | 4.5-3     |  |
| Lymph Node, Mesenteric                        | (49)     | (50)     | (50)          | (49)      |  |
| Angiectasis                                   | 1 (2%)   |          |               |           |  |
| Ectasia                                       | 1 (2%)   |          |               |           |  |
| Hemorrhage                                    | 1 (2%)   |          |               |           |  |
| Hyperplasia, Lymphoid                         | 1 (2%)   |          | 2 (4%)        |           |  |
| Infiltration Cellular, Histiocyte             | 9 (18%)  | 5 (10%)  | 5 (10%)       | 3 (6%)    |  |
| Spleen  | (49)     | (50)     | (49)          | (49)      |  |
| Angiectasis                                   | , ,      | ` ,      | 1 (2%)        | , ,       |  |
| Hematopoietic Cell Proliferation              | 8 (16%)  | 10 (20%) | 5 (10%)       | 8 (16%)   |  |
| Hemorrhage                                    | ,        | ,        | 1 (2%)        | ,         |  |
| Hemorrhage, Chronic                           | 1 (2%)   | 3 (6%)   | 2 (4%)        |           |  |
| Hyperplasia, Lymphoid, Focal                  | 1 (2%)   | - (-,-)  | _ ( · · · · ) |           |  |
| Hyperplasia, Lymphoid                         | . (=73)  |          | 2 (4%)        |           |  |
| Infarct                                       |          |          | 1 (2%)        |           |  |
| Thymus  | (47)     | (43)     | (46)          | (45)      |  |
| Cyst  | (41)     | (40)     | (40)          | 1 (2%)    |  |
|   |          |          |               | 1 (270)   |  |
| ITEGUMENTARY SYSTEM                           |          |          |               |           |  |
| Mammary Gland                                 | (30)     | (29)     | (28)          | (34)      |  |
| Galactocele                                   | ,        | 1 (3%)   | 1 (4%)        | 3 (9%)    |  |
| Inflammation, Suppurative                     | 1 (3%)   | (2.2)    | ()            | - (-/-)   |  |
| Skin  | (49)     | (50)     | (50)          | (50)      |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS MALE  | CONTROL                               | 16 PPM                              | 32 PPM                               | 64 PPM  |  |
|--|---------------------------------------|-------------------------------------|--------------------------------------|---|--|
| Cyst Epithelial Inclusion<br>Ulcer<br>Subcutaneous Tissue, Fibrosis<br>Subcutaneous Tissue, Inflammation | 2 (4%)<br>5 (10%)<br>1 (2%)<br>1 (2%) | 1 (2%)                              | 3 (6%)<br>2 (4%)                     | 1 (2%)  |  |
| MUSCULOSKELETAL SYSTEM   |                                       |                                     |                                      |   |  |
| Bone<br>Hyperostosis   | (49)                                  | (50)<br>1 (2%)                      | (50)<br>1 (2%)                       | (50)  |  |
| NERVOUS SYSTEM   |                                       |                                     |                                      |   |  |
| Brain Compression Hemorrhage Necrosis Thrombosis   | (49)<br>10 (20%)<br>1 (2%)            | (50)<br>9 (18%)<br>1 (2%)<br>1 (2%) | (50)<br>18 (36%)<br>3 (6%)<br>1 (2%) | (50)<br>9 (18%)<br>2 (4%)<br>2 (4%)<br>1 (2%) |  |
| RESPIRATORY SYSTEM   |                                       |                                     |                                      |   |  |
| Larynx<br>Foreign Body<br>Inflammation, Chronic Active   | (48)<br>2 (4%)<br>3 (6%)              | (50)<br>3 (6%)                      | (50)<br>1 (2%)                       | (50)  |  |
| Metaplasia, Squamous<br>Lung<br>Foreign Body   | 1 (2%)<br>(49)<br>1 (2%)              | (50)                                | 1 (2%)<br>(50)                       | (50)  |  |
| Hemorrhage<br>Inflammation   | 1 (270)                               | 1 (2%)<br>1 (2%)                    | 3 (6%)                               | 2 (4%)<br>2 (4%)                              |  |
| Thrombosis<br>Alveolar Epithelium, Hyperplasia<br>Alveolar Epithelium, Metaplasia, Squamous              | 8 (16%)<br>2 (4%)                     | 12 (24%)<br>1 (2%)                  | 1 (2%)<br>11 (22%)                   | 1 (2%)<br>7 (14%)<br>1 (2%)                   |  |
| Alveolus, Infiltration Cellular, Histiocyte<br>Nose<br>Foreign Body<br>Hemorrhage                        | 4 (8%)<br>(49)<br>7 (14%)             | 1 (2%)<br>(49)<br>8 (16%)           | (50)<br>6 (12%)                      | 1 (2%)<br>(49)<br>8 (16%)<br>1 (2%)           |  |
| Inflammation, Suppurative Inflammation, Chronic Active Glands, Olfactory Epithelium, Hyperplasia         | 1 (2%)<br>9 (18%)                     | 1 (2%)<br>12 (24%)                  | 22 (44%)                             | 28 (57%)<br>4 (8%)                            |  |
| Glands, Respiratory Epithelium, Hyperplasia Olfactory Epithelium, Accumulation, Hyaline                  | 3 (6%)                                | 14 (29%)<br>5 (10%)                 | 39 (78%)<br>4 (8%)                   | 45 (92%)<br>7 (14%)                           |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05
Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL
CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

Lab: BNW

| FISCHER 344 RATS MALE  | CONTROL           | 16 PPM               | 32 PPM               | 64 PPM               |  |
|--|-------------------|----------------------|----------------------|----------------------|--|
| Droplet  |                   |                      |                      |                      |  |
| Olfactory Epithelium, Atrophy  | 1 (2%)            | 21 (43%)             | 26 (52%)             | 26 (53%)             |  |
| Olfactory Epithelium, Degeneration   |                   |                      | 1 (2%)               | 7 (14%)              |  |
| Olfactory Epithelium, Hyperplasia  |                   | 1 (2%)               | 3 (6%)               | 5 (10%)              |  |
| Olfactory Epithelium, Hyperplasia, Basal Cell<br>Olfactory Epithelium, Metaplasia, | 1 (2%)            | 19 (39%)<br>10 (20%) | 42 (84%)<br>18 (36%) | 42 (86%)<br>29 (59%) |  |
| Respiratory  | 1 (270)           | 10 (20%)             | 16 (36%)             | 29 (39%)             |  |
| Olfactory Epithelium, Necrosis   |                   |                      | 2 (4%)               | 6 (12%)              |  |
| Respiratory Epithelium, Hyperplasia  | 5 (10%)           | 21 (43%)             | 44 (88%)             | 42 (86%)             |  |
| Respiratory Epithelium, Metaplasia,  | 2 (4%)            | 2 (4%)               | 2 (4%)               | 4 (8%)               |  |
| Squamous   | 45)               | 4.1                  | 4-1                  | 453                  |  |
| Pleura   | (0)               | (1)                  | (0)                  | (0)                  |  |
| PECIAL SENSES SYSTEM   |                   |                      |                      |                      |  |
| Ear  | (1)               | (0)                  | (0)                  | (0)                  |  |
| Eye  | (49)              | (50)                 | (50)                 | (50)                 |  |
| Inflammation, Chronic Active   |                   |                      | 1 (2%)               |                      |  |
| Cornea, Mineralization   | 1 (2%)            | 0 (00()              | 0 (40()              |                      |  |
| Lens, Cataract   | 1 (2%)            | 3 (6%)               | 2 (4%)               | (0)                  |  |
| Zymbal's Gland   | (0)               | (1)                  | (0)                  | (0)                  |  |
| RINARY SYSTEM  |                   |                      |                      |                      |  |
| Kidney   | (49)              | (50)                 | (50)                 | (50)                 |  |
| Cyst   | 1 (2%)            | 2 (4%)               | 3 (6%)               | 2 (4%)               |  |
| Infarct  | 1 (2%)            | 1 (2%)               | 2 (4%)               |                      |  |
| Inflammation, Suppurative  | 1 (2%)            | 2 (4%)               | 2 (4%)               | 1 (2%)               |  |
| Nephropathy, Chronic<br>Transitional Epithelium, Infarct                           | 42 (86%)          | 47 (94%)             | 48 (96%)             | 48 (96%)             |  |
| Urinary Bladder  | (49)              | (50)                 | 1 (2%)<br>(50)       | (50)                 |  |
| Edema  | ( <del>4</del> 3) | (50)                 | (50)                 | 1 (2%)               |  |
| Inflammation, Chronic  | 1 (2%)            |                      | 1 (2%)               | . (= /0)             |  |
| Transitional Epithelium, Hyperplasia   | 1 (2%)            |                      | (/                   |                      |  |

\*\*\* END OF MALE \*\*\*

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL

CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS FEMALE          | CONTROL           | 16 PPM           | 32 PPM    | 64 PPM             |  |
|----------------------------------|-------------------|------------------|-----------|--------------------|--|
| Disposition Summary              |                   |                  |           |                    |  |
| Animals Initially in Study       | 50                | 50               | 50        | 50                 |  |
| Early Deaths                     |                   |                  |           |                    |  |
| Moribund Sacrifice               | 18                | 16               | 19        | 19                 |  |
| Natural Death                    | 3                 | 3                | 4         | 5                  |  |
| Survivors                        |                   | _                |           |                    |  |
| Natural Death                    | 00                | 1                | 07        | 00                 |  |
| Terminal Sacrifice               | 29<br>50          | 30               | 27        | 26<br>50           |  |
| Animals Examined Microscopically | 50                | 50               | 50        | 50                 |  |
| ALIMENTARY SYSTEM                |                   |                  |           |                    |  |
| Esophagus                        | (50)              | (50)             | (50)      | (50)               |  |
| Intestine Large, Cecum           | (48)              | (48)             | (47)      | (46)               |  |
| Ulcer                            |                   | 1 (2%)           |           |                    |  |
| Serosa, Inflammation             | 1 (2%)            |                  |           |                    |  |
| Intestine Large, Colon           | (48)              | (48)             | (47)      | (47)               |  |
| Serosa, Inflammation             | 1 (2%)            |                  |           |                    |  |
| Intestine Small, Duodenum        | (49)              | (50)             | (48)      | (47)               |  |
| Serosa, Inflammation             | 1 (2%)            |                  |           |                    |  |
| Intestine Small, Ileum           | (48)              | (48)             | (46)      | (46)               |  |
| Intestine Small, Jejunum         | (48)              | (48)             | (47)      | (46)               |  |
| Liver                            | (50)              | (50)             | (50)      | (50)               |  |
| Angiectasis                      | ()                | 4 (8%)           | 1 (2%)    | 1 (2%)             |  |
| Basophilic Focus                 | 37 (74%)          | 36 (72%)         | 40 (80%)  | 31 (62%)           |  |
| Clear Cell Focus                 | 6 (12%)           | 6 (12%)          | 7 (14%)   | 7 (14%)            |  |
| Eosinophilic Focus               | 4 (00()           | 2 (4%)           | 3 (6%)    | 3 (6%)             |  |
| Fibrosis                         | 1 (2%)            | 0 (40/)          | E (400/)  | 0 (40()            |  |
| Hepatodiaphragmatic Nodule       | 3 (6%)            | 2 (4%)           | 5 (10%)   | 2 (4%)             |  |
| Inflammation, Granulomatous      | 1 (2%)            |                  | 2 (40/)   | 4 (20/)            |  |
| Inflammation, Chronic Active     | 1 (2%)            | 4 (99/)          | 2 (4%)    | 1 (2%)             |  |
| Mixed Cell Focus<br>Necrosis     | 5 (10%)           | 4 (8%)<br>1 (2%) | 4 (8%)    | 12 (24%)<br>2 (4%) |  |
| Vacuolization Cytoplasmic        | 8 (16%)           | 3 (6%)           | 3 (6%)    | 2 (4%)<br>4 (8%)   |  |
| Centrilobular, Necrosis          | 8 (16%)<br>1 (2%) | 3 (0%)           | 3 (0%)    | 4 (8%)<br>1 (2%)   |  |
| Oval Cell, Hyperplasia           | I (270)           |                  |           | 1 (2%)             |  |
| Mesentery                        | (13)              | (12)             | (10)      | (9)                |  |
| Necrosis                         | 13 (100%)         | 12 (100%)        | 10 (100%) | 9 (100%)           |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL

CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS FEMALE              | CONTROL  | 16 PPM   | 32 PPM    | 64 PPM      |  |
|--------------------------------------|----------|----------|-----------|-------------|--|
| Oral Mucosa                          | (1)      | (0)      | (2)       | (1)         |  |
| Foreign Body                         | 1 (100%) | (-)      | 1 (50%)   | ( )         |  |
| Ulcer                                | ( /      |          | 1 (50%)   |             |  |
| Pancreas                             | (50)     | (50)     | (50)      | (50)        |  |
| Inflammation                         | 1 (2%)   | ()       | ()        | ()          |  |
| Acinus, Atrophy                      | 6 (12%)  | 9 (18%)  | 11 (22%)  | 14 (28%)    |  |
| Acinus, Inflammation, Chronic        | 3 (1=73) | 3 (1373) | (==/5)    | 1 (2%)      |  |
| Salivary Glands                      | (50)     | (50)     | (50)      | (50)        |  |
| Stomach, Forestomach                 | (50)     | (50)     | (50)      | (50)        |  |
| Necrosis                             | (00)     | (88)     | (00)      | 1 (2%)      |  |
| Ulcer                                | 3 (6%)   | 5 (10%)  | 1 (2%)    | 2 (4%)      |  |
| Epithelium, Hyperplasia              | 1 (2%)   | 1 (2%)   | . (= /0)  | 1 (2%)      |  |
| Serosa, Inflammation                 | 1 (2%)   | 1 (270)  |           | 1 (270)     |  |
| Stomach, Glandular                   | (49)     | (50)     | (50)      | (48)        |  |
| Erosion                              | 3 (6%)   | 1 (2%)   | 1 (2%)    | 3 (6%)      |  |
| Ulcer                                | 1 (2%)   | 1 (270)  | 1 (2%)    | 1 (2%)      |  |
| Serosa, Inflammation                 | 1 (2%)   |          | 1 (270)   | 1 (270)     |  |
| Tongue                               | (0)      | (0)      | (2)       | (1)         |  |
| Inflammation, Granulomatous, Chronic | (0)      | (0)      | (2)       | 1 (100%)    |  |
| Active                               |          |          |           | 1 (10070)   |  |
| Epithelium, Hyperplasia              |          |          | 1 (50%)   |             |  |
|                                      |          |          | . (55.15) |             |  |
| ARDIOVASCULAR SYSTEM                 |          |          |           |             |  |
| Heart                                | (50)     | (50)     | (50)      | (50)        |  |
| Cardiomyopathy                       | 43 (86%) | 45 (90%) | 42 (84%)  | 42 (84%)    |  |
| Atrium, Thrombosis                   | 2 (4%)   | (0070)   | 2 (4%)    | 4 (8%)      |  |
|                                      | ()       |          | (,        | ()          |  |
| NDOCRINE SYSTEM                      |          |          |           |             |  |
| Adrenal Cortex                       | (50)     | (50)     | (50)      | (50)        |  |
| Angiectasis                          | 3 (6%)   | · -/     | · -/      | ,           |  |
| Degeneration, Cystic                 | ,        |          | 1 (2%)    | 2 (4%)      |  |
| Hemorrhage                           |          |          | · · · · / | 1 (2%)      |  |
| Hyperplasia                          | 28 (56%) | 23 (46%) | 22 (44%)  | 21 (42%)    |  |
| Necrosis                             | 1 (2%)   | 1 (2%)   | (,        | ( , -,      |  |
| Vacuolization Cytoplasmic            | 3 (6%)   | 3 (6%)   | 1 (2%)    | 4 (8%)      |  |
| Adrenal Medulla                      | (50)     | (50)     | (50)      | (50)        |  |
| Hyperplasia                          | 5 (10%)  | 7 (14%)  | 3 (6%)    | 2 (4%)      |  |
| Necrosis                             | 1 (2%)   | . ( )    | - ()      | = ( · · - / |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL

CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Lab: BNW

Date Report Reqsted: 08/09/2006

First Dose M/F: 10/01/01 / 10/01/01

Time Report Reqsted: 14:01:40

| FISCHER 344 RATS FEMALE          | CONTROL  | 16 PPM   | 32 PPM   | 64 PPM   |  |
|----------------------------------|----------|----------|----------|----------|--|
| Islets, Pancreatic               | (50)     | (50)     | (50)     | (50)     |  |
| Hyperplasia                      | 1 (2%)   | 4 (8%)   | 4 (8%)   |          |  |
| Parathyroid Gland                | (49)     | (47)     | (50)     | (47)     |  |
| Pituitary Gland                  | (50)     | (50)     | (50)     | (50)     |  |
| Hemorrhage                       | 1 (2%)   | 5 (10%)  | 2 (4%)   | 3 (6%)   |  |
| Pars Distalis, Cyst              | 4 (8%)   | 2 (4%)   | 3 (6%)   | - ()     |  |
| Pars Distalis, Hyperplasia       | 11 (22%) | 5 (10%)  | 6 (12%)  | 9 (18%)  |  |
| Thyroid Gland                    | (50)     | (50)     | (50)     | (50)     |  |
| C-cell, Hyperplasia              | 21 (42%) | 16 (32%) | 18 (36%) | 18 (36%) |  |
| GENERAL BODY SYSTEM              |          |          |          |          |  |
| Tissue NOS                       | (1)      | (0)      | (1)      | (0)      |  |
| Fat, Inflammation, Chronic       | 1 (100%) |          |          |          |  |
| GENITAL SYSTEM                   |          |          |          |          |  |
| Clitoral Gland                   | (50)     | (49)     | (49)     | (47)     |  |
| Cyst                             | 1 (2%)   |          | 1 (2%)   |          |  |
| Hyperplasia                      | 4 (8%)   | 4 (8%)   | 4 (8%)   | 5 (11%)  |  |
| Inflammation, Suppurative        |          |          | 1 (2%)   | 1 (2%)   |  |
| Inflammation, Chronic Active     | 8 (16%)  | 4 (8%)   | 9 (18%)  | 5 (11%)  |  |
| Ovary                            | (50)     | (50)     | (50)     | (50)     |  |
| Cyst                             | 6 (12%)  | 5 (10%)  | 6 (12%)  | 8 (16%)  |  |
| Inflammation                     | 1 (2%)   | 0 (4004) | 0 (00()  | 0 (400() |  |
| Interstitial Cell, Hyperplasia   | 5 (10%)  | 8 (16%)  | 3 (6%)   | 6 (12%)  |  |
| Uterus                           | (50)     | (50)     | (50)     | (50)     |  |
| Angiectasis                      |          |          | 1 (2%)   |          |  |
| Cyst                             |          |          | 1 (2%)   |          |  |
| Decidual Reaction                |          |          | 1 (2%)   |          |  |
| Dilatation                       | 4 (00()  | 4 (00()  | 1 (2%)   | 4 (00()  |  |
| Fibrosis                         | 1 (2%)   | 1 (2%)   | 2 (69/)  | 1 (2%)   |  |
| Hemorrhage                       | 1 (2%)   | 2 (4%)   | 3 (6%)   | 1 (2%)   |  |
| Inflammation, Chronic Active     | 0 (00()  | 0 (00()  | 0 (400() | 1 (2%)   |  |
| Endometrium, Hyperplasia, Cystic | 3 (6%)   | 3 (6%)   | 8 (16%)  | 5 (10%)  |  |
| HEMATOPOIETIC SYSTEM             |          |          |          |          |  |
| Bone Marrow                      | (50)     | (50)     | (50)     | (50)     |  |
| Erythroid Cell, Hyperplasia      | 1 (2%)   | 3 (6%)   | 4 (8%)   | 1 (2%)   |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL

CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS FEMALE           | CONTROL  | 16 PPM   | 32 PPM              | 64 PPM    |  |
|-----------------------------------|----------|----------|---------------------|-----------|--|
| Lymph Node                        | (4)      | (0)      | (3)                 | (3)       |  |
| Deep Cervical, Angiectasis        |          |          |                     | 1 (33%)   |  |
| Pancreatic, Angiectasis           |          |          | 1 (33%)             |           |  |
| Lymph Node, Bronchial             | (4)      | (2)      | (4)                 | (10)      |  |
| Angiectasis                       |          |          | 1 (25%)             | 1 (10%)   |  |
| Hyperplasia, Lymphoid             |          |          |                     | 2 (20%)   |  |
| Lymph Node, Mediastinal           | (29)     | (27)     | (30)                | (25)      |  |
| Angiectasis                       |          |          | 1 (3%)              |           |  |
| Hyperplasia, Lymphoid             |          |          | 1 (3%)              |           |  |
| Infiltration Cellular, Histiocyte | 1 (3%)   | 1 (4%)   |                     |           |  |
| Lymph Node, Mesenteric            | (49)     | (50)     | (49)                | (50)      |  |
| Angiectasis                       | 1 (2%)   | 1 (2%)   |                     | 1 (2%)    |  |
| Hemorrhage                        |          | 1 (2%)   |                     |           |  |
| Hyperplasia, Lymphoid             | 2 (4%)   |          |                     |           |  |
| Infiltration Cellular, Histiocyte | 9 (18%)  | 9 (18%)  | 3 (6%)              | 4 (8%)    |  |
| Spleen                            | (50)     | (50)     | (50)                | (49)      |  |
| Accessory Spleen                  | 1 (2%)   |          |                     |           |  |
| Hematopoietic Cell Proliferation  | 21 (42%) | 26 (52%) | 22 (44%)            | 17 (35%)  |  |
| Hemorrhage, Chronic               | 1 (2%)   |          |                     | 1 (2%)    |  |
| Capsule, Fibrosis                 |          | 1 (2%)   |                     | 1 (2%)    |  |
| Thymus                            | (46)     | (45)     | (47)                | (48)      |  |
| NTEGUMENTARY SYSTEM               |          |          |                     |           |  |
| Mammary Gland                     | (50)     | (50)     | (50)                | (50)      |  |
| Galactocele                       | 2 (4%)   | 1 (2%)   | 2 (4%)              | 1 (2%)    |  |
| Hyperplasia                       | 1 (2%)   | ( /      | ( )                 | ( )       |  |
| Inflammation, Chronic Active      | 1 (2%)   |          |                     |           |  |
| Epithelium, Hyperplasia           | ( /      |          | 1 (2%)              | 1 (2%)    |  |
| Skin                              | (50)     | (50)     | (50)                | (50)      |  |
| Cyst Epithelial Inclusion         | 1 (2%)   | ()       | ()                  | 1 (2%)    |  |
| Inflammation, Granulomatous       | . (=,-,  |          |                     | 1 (2%)    |  |
| Ulcer                             | 1 (2%)   | 1 (2%)   | 1 (2%)              | - (= . •) |  |
| Subcutaneous Tissue, Hemorrhage   | . (=,-,  | (= , = , | (= , -,             | 1 (2%)    |  |
| Subcutaneous Tissue, Inflammation | 1 (2%)   |          |                     | . (=/5)   |  |
| MUSCULOSKELETAL SYSTEM            |          |          |                     |           |  |
| Bone                              | (50)     | (50)     | (50)                | (50)      |  |
| Hyperostosis                      | \/       | 1 (2%)   | \ -' <del>-</del> / | (/        |  |

a - Number of animals examined microscopically at site and number of animals with lesion

TDMS No. 97008 - 05 Test Type: CHRONIC

Route: RESPIRATORY EXPOSURE WHOLE BODY

Species/Strain: RATS/F 344

PROPARGYL ALCOHOL CAS Number: 107-19-7

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

| FISCHER 344 RATS FEMALE  | CONTROL                             | 16 PPM                        | 32 PPM                             | 64 PPM                              |  |
|--|-------------------------------------|-------------------------------|------------------------------------|-------------------------------------|--|
| Nasal, Inflammation, Chronic Active<br>Skeletal Muscle<br>Fat, Necrosis  | (2)<br>1 (50%)                      | (0)                           | (1)                                | 1 (2%)<br>(0)                       |  |
| NERVOUS SYSTEM   |                                     |                               |                                    |                                     |  |
| Brain Compression Hemorrhage Inflammation, Suppurative Inflammation, Chronic Active Necrosis   | (50)<br>6 (12%)<br>2 (4%)<br>1 (2%) | (50)<br>11 (22%)              | (50)<br>4 (8%)                     | (50)<br>9 (18%)<br>2 (4%)<br>1 (2%) |  |
| RESPIRATORY SYSTEM   |                                     |                               |                                    |                                     |  |
| Larynx<br>Foreign Body<br>Inflammation, Chronic Active   | (50)<br>2 (4%)                      | (50)<br>3 (6%)<br>1 (2%)      | (50)<br>2 (4%)                     | (50)<br>6 (12%)<br>3 (6%)           |  |
| Metaplasia, Squamous<br>Lung<br>Foreign Body   | 1 (2%)<br>(50)                      | (50)                          | (50)                               | 2 (4%)<br>(50)<br>1 (2%)            |  |
| Hemorrhage<br>Inflammation<br>Inflammation, Suppurative  | 1 (2%)                              |                               | 1 (2%)                             | 1 (2%)                              |  |
| Alveolar Epithelium, Hyperplasia<br>Alveolar Epithelium, Metaplasia, Squamous  | 7 (14%)                             | 12 (24%)                      | 13 (26%)<br>1 (2%)                 | 5 (10%)                             |  |
| Alveolus, Infiltration Cellular, Histiocyte<br>Nose<br>Foreign Body<br>Inflammation, Suppurative   | 3 (6%)<br>(49)<br>1 (2%)            | 3 (6%)<br>(49)<br>4 (8%)      | 1 (2%)<br>(50)<br>4 (8%)<br>1 (2%) | 2 (4%)<br>(50)<br>6 (12%)           |  |
| Inflammation, Suppurative Inflammation, Chronic Active Epithelium, Nasolacrimal Duct, Hyperplasia  | 7 (14%)<br>1 (2%)                   | 9 (18%)                       | 11 (22%)                           | 18 (36%)                            |  |
| Glands, Olfactory Epithelium, Hyperplasia<br>Glands, Respiratory Epithelium, Hyperplasia<br>Nasolacrimal Duct, Inflammation, Chronic<br>Active | 2 (4%)<br>3 (6%)                    | 6 (12%)<br>33 (67%)<br>1 (2%) | 1 (2%)<br>44 (88%)                 | 2 (4%)<br>47 (94%)                  |  |
| Olfactory Epithelium, Accumulation, Hyaline Droplet  | 6 (12%)                             | 5 (10%)                       | 6 (12%)                            | 15 (30%)                            |  |
| Olfactory Epithelium, Atrophy Olfactory Epithelium, Degeneration   | 3 (6%)                              |                               | 28 (56%)<br>1 (2%)                 | 37 (74%)<br>4 (8%)                  |  |

a - Number of animals examined microscopically at site and number of animals with lesion

## **TDMS No.** 97008 - 05

P03: INCIDENCE RATES OF NON-NEOPLASTIC LESIONS BY ANATOMIC SITE(a)

Test Type: CHRONIC

PROPARGYL ALCOHOL **CAS Number:** 107-19-7

Species/Strain: RATS/F 344

Route: RESPIRATORY EXPOSURE WHOLE BODY

Pathologist: HARBO, S. - LIEUALLEN, W.

Date Report Reqsted: 08/09/2006 Time Report Reqsted: 14:01:40 First Dose M/F: 10/01/01 / 10/01/01

Lab: BNW

| FISCHER 344 RATS FEMALE                           | CONTROL          | 16 PPM   | 32 PPM             | 64 PPM   |  |
|---|------------------|----------|--------------------|----------|--|
| Olfactory Epithelium, Hyperplasia                 |                  |          |                    | 1 (2%)   |  |
| Olfactory Epithelium, Hyperplasia, Basal Cell     |                  | 28 (57%) | 42 (84%)           | 48 (96%) |  |
| Olfactory Epithelium, Metaplasia,<br>Respiratory  | 3 (6%)           | 2 (4%)   | 7 (14%)            | 17 (34%) |  |
| Olfactory Epithelium, Metaplasia, Squamous        |                  |          |                    | 1 (2%)   |  |
| Olfactory Epithelium, Necrosis                    |                  |          | 2 (4%)             | 5 (10%)  |  |
| Respiratory Epithelium, Hyperplasia               | 2 (4%)           | 23 (47%) | 25 (50%)           | 36 (72%) |  |
| Respiratory Epithelium, Metaplasia, Squamous      |                  | 1 (2%)   |                    | 4 (8%)   |  |
| SPECIAL SENSES SYSTEM                             |                  |          |                    |          |  |
| Eye   | (49)             | (50)     | (50)               | (50)     |  |
| Inflammation, Suppurative<br>Lens, Cataract       | 1 (2%)<br>4 (8%) | 5 (10%)  | 8 (16%)            | 3 (6%)   |  |
| Zymbal's Gland                                    | (0)              | (0)      | (2)                | (1)      |  |
| JRINARY SYSTEM                                    |                  |          |                    |          |  |
| Kidney  | (50)             | (50)     | (50)               | (49)     |  |
| Infarct   | 1 (2%)           | 1 (2%)   |                    | 1 (2%)   |  |
| Inflammation, Suppurative                         | 40 (000()        | 40 (000) | 44 (000)           | 1 (2%)   |  |
| Nephropathy, Chronic<br>Bilateral, Hydronephrosis | 40 (80%)         | 46 (92%) | 41 (82%)<br>1 (2%) | 44 (90%) |  |
| Pelvis, Transitional Epithelium, Hyperplasia      | (40)             | (50)     | 1 (2%)             | (40)     |  |
| Urinary Bladder                                   | (49)             | (50)     | (50)               | (49)     |  |

\*\*\* END OF REPORT \*\*\*

a - Number of animals examined microscopically at site and number of animals with lesion